

IN THE CLAIMS:

Please cancel claims 1-7 without prejudice.

Please add the following new claims:

- a³
8. (New) A method for implementing an encryption system, comprising the steps of:
- generating a Vernam key via a symmetrical cipher, the generating being aided by using a secret key and a variable parameter, the Vernam key having a length that is equal to a length of a message to be protected, the secret key having a defined key length, the variable parameter having a length which is a function of the defined key length;
 - encrypting, via a Vernam key, the message using logic operations of a Vernam cipher;
 - communicating, from a sending point to a receiving point, the secret key and the variable parameter via at least one of (A) a secure channel separate from a message-transmission path and (B) the message-transmission path, the message-transmission path being secured via an asymmetrical cipher;
 - regenerating the Vernam key; and
 - decrypting the message using the regenerated Vernam key.
9. (New) The method according to claim 8, wherein the encryption system uses a Vernam cipher.
10. (New) The method according to claim 9, wherein the Vernam cipher is a very simple mathematical operation.
11. (New) The method according to claim 10, wherein the very simple mathematical operation is EXOR.

12. (New) The method according to claim 8, further comprising the steps of:

installing a symmetrical cipher and a storage space in a crypto-module, the storage space storing the Vernam key, the crypto-module being separate from an encryptor, the encryptor including at least one of a chip card, a multifunctional PC interface adapter and a PCMCIA module; and

performing Vernam cipher operations exclusively in the encryptor.

13. (New) The method according to claim 8, further comprising the steps of:

implementing the asymmetrical cipher and a storage space in an external crypto-module, the external crypto-module being separate from the encryptor; and controlling, via the Vernam cipher, encryption operations in the encryptor.

14. (New) The method according to claim 8, wherein the Vernam key is stored in an encryptor.

15. (New) An encryption system, comprising:

means for generating a Vernam key via a symmetrical cipher, the generating being aided by using a secret key and a variable parameter, the Vernam key having a length that is equal to a length of a message to be protected, the secret key having a defined key length, the variable parameter having a length which is a function of the defined key length;

means for encrypting, via a Vernam key, the message using logic operations of a Vernam cipher;

means for communicating, from a sending point to a receiving point, the secret key and the variable parameter via at least one of (A) a secure channel separate from a message-transmission path and (B) the message-transmission path, the message-transmission path being secured via an asymmetrical cipher;

means for regenerating the Vernam key;

means for decrypting the message using the regenerated Vernam key;

crypto-hardware including at least one of a chipcard and a multifunctional PC interface adapter with built-in special crypto-hardware; and

the encryptor being capable of coupling to the crypto-hardware, the encryptor including at least one of a personal computer, software and a terminal which implements a Vernam cipher for broad-band applications in software.

16. (New) The encryption system according to claim 15, wherein the crypto-hardware is designed as an external crypto-module and wherein the crypto-hardware has an intermediate storage, the intermediate storage storing reserve storage of the Vernam key.

17. (New) The encryption system according to claim 16, wherein the intermediate storage is disposed in one of the personal computer and the terminal.

18. (New) An encryption system, comprising:

a secret key having a defined key length;

a variable parameter having a length which is a function of the defined key length;

a symmetrical cipher;

a Vernam key having a length that is equal to a length of a message to be protected; the Vernam key being generating via the symmetrical cipher with aid from the secret key and the variable parameter, the Vernam key encrypting the message using logic operations from a Vernam cipher; and

at least one of a message-transmission path and a secure channel, the message-transmission path being a path over which the encrypted message is communicated, the message-transmission path being secured via an asymmetrical cipher, the secure channel being separate from the message-transmission path,

wherein the secret key and the variable parameter are communicated over at least one of the message-transmission path and the secure channel and, subsequently, used in regenerating the Vernam key, the regenerated Vernam key decrypting the message.